2. (Amended) A semiconductor device comprising:

a substrate;

a first thin film transistor having a first active layer comprising $Si_{1-X}Ge_X$ where $0 < X < 1$ formed over said substrate; and

a second thin film transistor having a second active layer comprising silicon formed over said substrate, wherein said second active layer contains no germanium,

wherein said first thin film transistor constitutes a CMOS circuit.

3. (Amended) A semiconductor device comprising:

a substrate;

a first thin film transistor having a first active layer comprising $Si_{1-X}Ge_X$ where $0 < X < 1$; and

a second thin film transistor having a second active layer comprising silicon,

wherein said first thin film transistor constitutes a driver circuit and said second thin film transistor constitutes a pixel matrix circuit.

4. A semiconductor device according to claim 1, wherein said $Si_{1-X}Ge_X$ is polycrystalline silicon germanium and said silicon is polysilicon.

5. A semiconductor device according to claim 2, wherein said $Si_{1-X}Ge_X$ is polycrystalline silicon germanium and said silicon is polysilicon.

6. A semiconductor device according to claim 3, wherein said $Si_{1-X}Ge_X$ is polycrystalline silicon germanium and said silicon is polysilicon.

7. A semiconductor device according to claim 1, wherein said $Si_{1-X}Ge_X$ is polycrystalline silicon germanium and said silicon is amorphous silicon.

8. A semiconductor device according to claim 2, wherein said $Si_{1-X}Ge_X$ is polycrystalline silicon germanium and said silicon is amorphous silicon.

9. A semiconductor device according to claim 3, wherein said $Si_{1-x}Ge_x$ is polycrystalline silicon germanium and said silicon is amorphous silicon.

10. A semiconductor device according to claim 1, wherein said first active layer further includes nickel at a concentration of 1×10^{15} to 1×10^{16} atoms/cm^3.

11. A semiconductor device according to claim 2, wherein said first active layer further includes nickel at a concentration of 1×10^{15} to 1×10^{16} atoms/cm^3.

12. A semiconductor device according to claim 3, wherein said first active layer further includes nickel at a concentration of 1×10^{15} to 1×10^{16} atoms/cm^3.

13. (Amended) A semiconductor device according to claim 1 wherein said semiconductor device is selected from the group consisting of a handy phone, a video camera, a mobile computer, a head-mount display, a rear-type projector and a front-type projector.

14. (Amended) A semiconductor device according to claim 2 wherein said semiconductor device is selected from the group consisting of a handy phone, a video camera, a mobile computer, a head-mount display, a rear-type projector and a front-type projector.

15. (Amended) A semiconductor device according to claim 3 wherein said semiconductor device is selected from the group consisting of a handy phone, a video camera, a mobile computer, a head-mount display, a rear-type projector and a front-type projector.

Please add the following new claims:

--30. (New) A semiconductor device having an active matrix type display device, said display device comprising:

a substrate having an insulating surface;

a plurality of pixel electrodes arranged in a matrix formed over said substrate;

a plurality of first thin film transistors for switching said pixel electrodes and formed over said substrate;

a driver circuit formed over said substrate for driving said plurality of first thin film transistors, said driver circuit comprising at least one second thin film transistor;

each of said first thin film transistors and said second thin film transistor comprising:

a semiconductor film comprising silicon and including at least one channel region;

a gate insulating film adjacent to said channel region; and

a gate electrode adjacent to said gate insulating film,

wherein the semiconductor film of said second thin film transistor contains germanium at a higher concentration than the semiconductor film of said first thin film transistors.

31. (New) The semiconductor device according to claim 30 wherein the semiconductor film of said plurality of first thin film transistors is not doped with germanium while the semiconductor film of said second thin film transistor is doped with germanium.

32. (New) A semiconductor device according to claim 30 wherein said semiconductor device is selected from the group consisting of a handy phone, a video camera, a mobile computer, a head-mount display, a rear-type projector and a front-type projector.

33. (New) A semiconductor device comprising:

a substrate having an insulating surface;

a first thin film transistor formed over said substrate, said first thin film transistor comprising:

a first semiconductor film comprising crystalline silicon formed over said substrate and having a channel region;

a first gate insulating film adjacent to said first semiconductor film; and

a first gate electrode adjacent to said first gate insulating film;

a second thin film transistor formed over said substrate, said second thin film transistor comprising:

a second semiconductor film comprising crystalline silicon formed over said substrate and having a channel region;

a second gate insulating film adjacent to said second semiconductor film; and

a second gate electrode adjacent to said second gate insulating film,

wherein said first semiconductor film contains germanium at a higher concentration than said second semiconductor film.

34. (New) The semiconductor device according to claim 33 wherein said first semiconductor film is doped with germanium while the second semiconductor film is not intentionally doped with germanium.

35. (New) A semiconductor device according to claim 33 wherein said semiconductor device is selected from the group consisting of a handy phone, a video camera, a mobile computer, a head-mount display, a rear-type projector and a front-type projector.

36. (New) A semiconductor device comprising:

a substrate having an insulating surface;

a first thin film transistor formed over said substrate, said first thin film transistor comprising:

a first semiconductor film comprising crystalline silicon formed over said substrate and having a channel region;

a first gate insulating film adjacent to said first semiconductor film; and

a first gate electrode adjacent to said first gate insulating film;

a second thin film transistor formed over said substrate, said second thin film transistor comprising:

a second semiconductor film comprising amorphous silicon formed over said substrate and having a channel region;

a second gate insulating film adjacent to said second semiconductor film; and